

# Emotional abilities and the development of cross-cultural competence and adjustment.

An empirical study conducted by

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# Background



*"Because in the 21st century, military strength will be measured not only by the weapons our troops carry, but by the languages they speak and the cultures they understand."*

~ President Barack Obama

*"Both military and civilian personnel should have cross-cultural training to successfully work in DOD's richly diverse organization, and to better understand the global environment in which we operate."*

~ Leon Panetta, Secretary of Defense



# Study Objectives

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- To investigate the role of understanding emotions and managing emotions in the development of cross-cultural competence.
- To examine the impact of cross-cultural competence on cross-cultural adjustment.

# Cross-Cultural Competence (3C)

<b>Knowledge and Cognition</b>	<b>Skills</b>	<b>Affect and Motivation</b>
Cultural Awareness	Flexibility	Initiative
Schema	Interpersonal skills	Openness
Cognitive Complexity	Self-regulation	Empathy
		Motivation

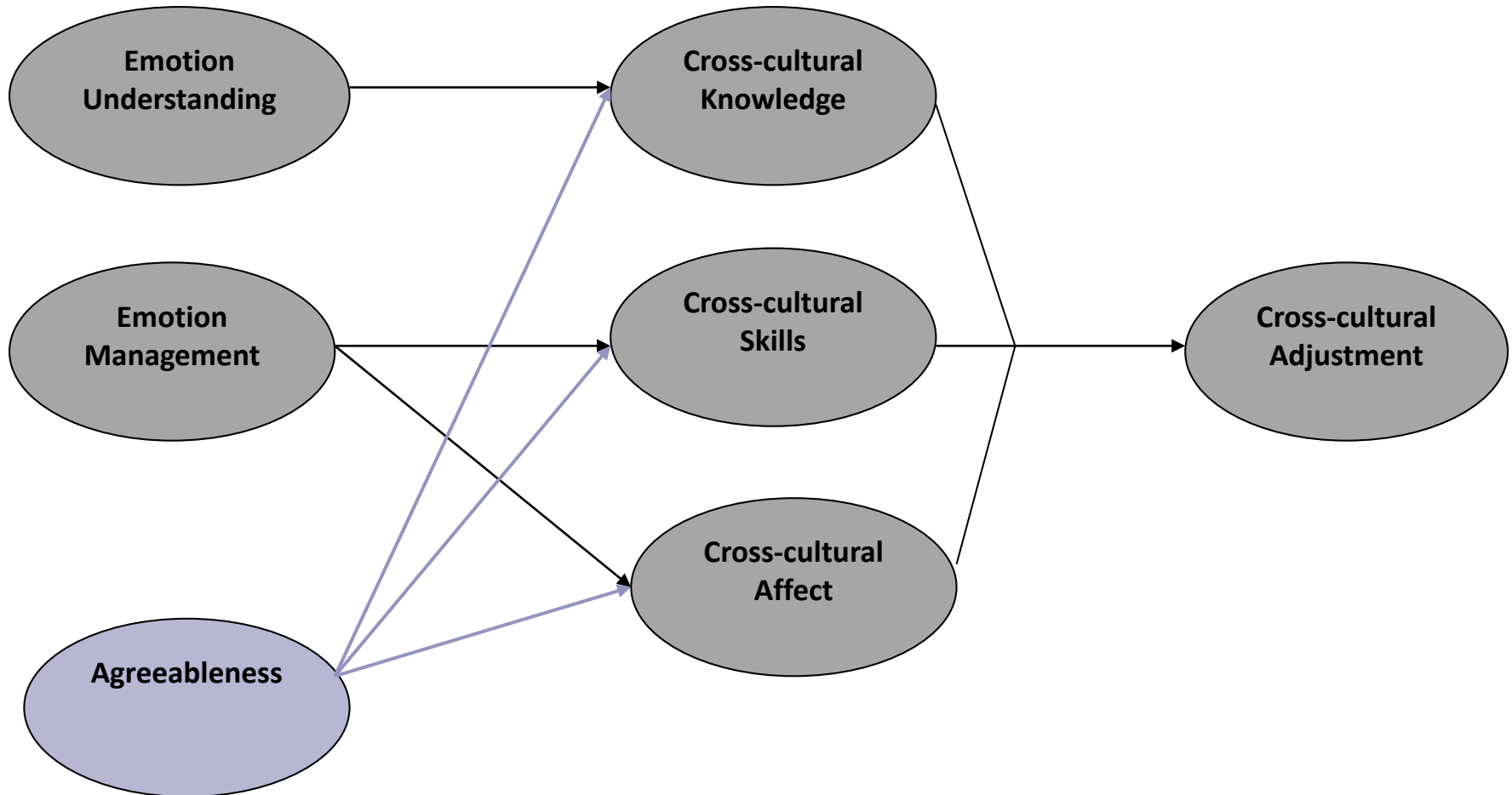
(Source: adapted from Abbe & Hajjar, 2009; Abbe et al., 2007)

# Study Variables

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- Emotional abilities as predictors
  - Emotional intelligence (EI)
    - Ability model
      - Emotion understanding
      - Emotion management
- Outcomes of cross-cultural competence
  - Cross-cultural Adjustment
- Role of personality
  - Agreeableness

# Proposed Model



## Understanding Emotions and Cross-Cultural Knowledge and Cognition

### Understanding emotions:

- Contributes to the understanding of key cultural concepts (i.e., cultural awareness).
- Helps to garner knowledge of the new social environment by using that information to develop a cross-cultural schema.
- Helps to identify and decipher emotional cues.
- H1: The ability to understand emotions will be positively related to one's cross-cultural knowledge and cognition.

# Managing Emotions and Cross-Cultural Skills

## Managing emotions:

- Is integral to social functioning and the development of interpersonal skills.
- Contributes to an individual's flexibility whereby the modulation of emotions target subsequent changes in thought and behavior.
- Is an important aspect of self-regulation.
- H2: The ability to manage emotions will be positively related to one's cross-cultural skills.

# Managing Emotions and Cross-Cultural Affect and Motivation

## Managing emotions:

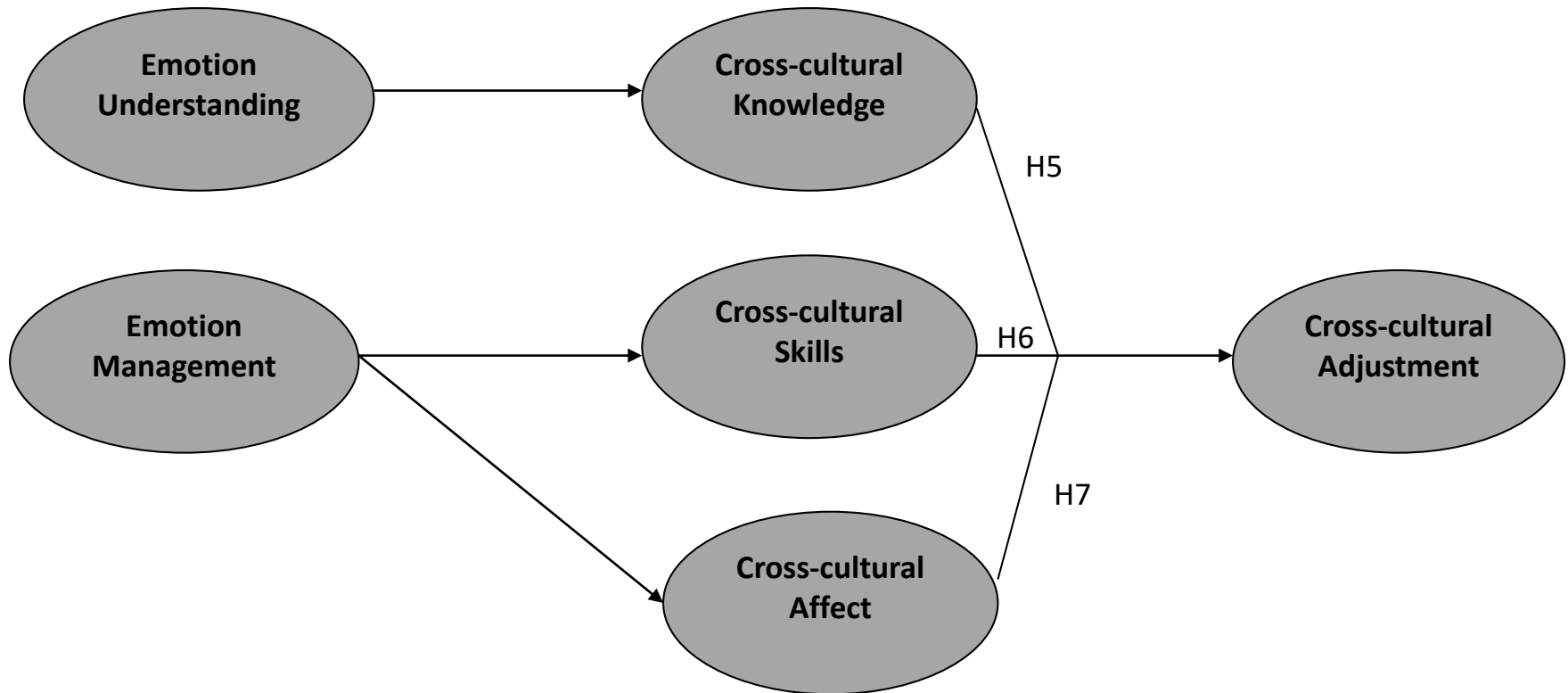
- Shows the individual's openness to learn about the new culture.
- Increases one's likelihood to initiate and engage in social interactions.
- Influences one's level of cultural empathy.
- Facilitates positive social interactions, which contribute to one's motivation to engage the culture.
- H3: The ability to manage emotions will be positively related to one's cross-cultural affect and motivation.

# Cross-Cultural Competence and Cross-Cultural Adjustment

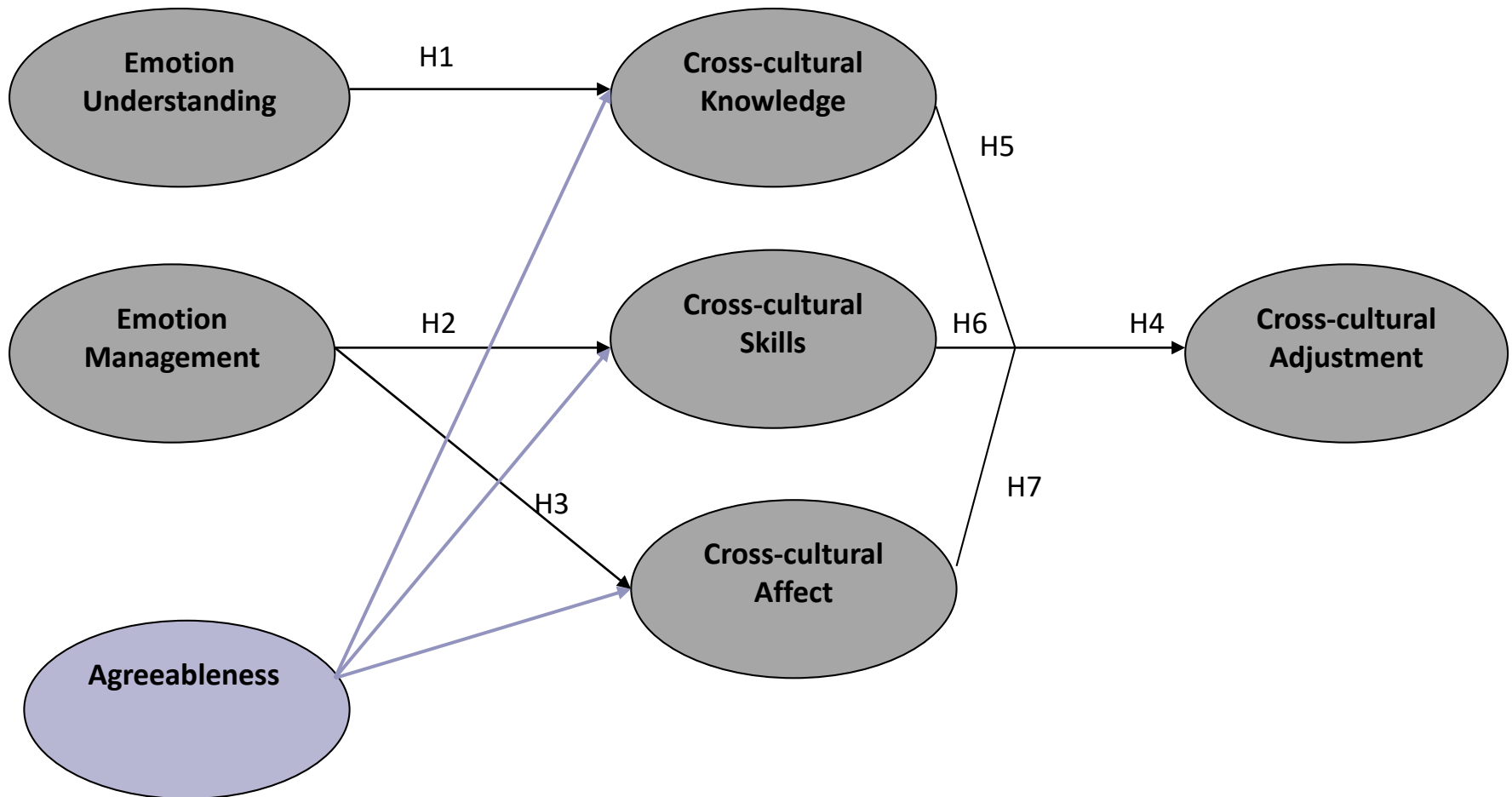
## Cross-cultural competence:

- Enhances the psychological and sociocultural adjustment of individuals.
- Provides the requisite knowledge, cultural flexibility, relational and perceptual skills, extra-cultural openness, etc., that are critical to one's cross-cultural adjustment.
- H4: Cross-cultural competence, defined as (a) knowledge and cognition, (b) skills, and (c) affect and motivation will be positively related to cross-cultural adjustment.

# Mediated Models



# Hypothesized Model



# Methodology

- Pilot Study
  - NEO-FFI
  - Agreeableness was related to the ability to manage emotions ( $r = .20, p < .05$ ).
- Focal Study
  - Participants
    - 425 Department of Defense (DOD) military, civilian, and contract personnel
      - Data were representative of both genders and all age groups
    - Had previous or current overseas experience or deployment history; had some contact with host nationals
- Procedure
  - Online survey; addendum to the DEOCS
  - Data analyses
    - SPSS , AMOS v. 18.0 and the Sobel test for mediating effects.

# Measures

<b>Study Variable</b>	<b>Measure</b>	<b># of Items</b>	<b>Scale Dimensions</b>	<b>Reliability (<math>\alpha</math>)</b>
Emotion Understanding	STEU (MacCann, 2006)	14	Emotions in Work Context	.69
Emotion Management	STEM (MacCann, 2006)	5	Anger; Sadness	.70
3C	Various sources	5	Knowledge & Cognition	.95
		6	Skills	.88
		8	Affect & Motivation	.91
Cross-cultural Adjustment	Black & Stephens (1989)	14	Work, Interaction & General Adjustment	.98
Personality	NEO-FFI (Costa & McCrae, 2004)	3	Agreeableness	.82

# Hypothesized Measurement Model

Model	$\chi^2$	$df$	$\chi^2/df$	GFI	CFI	PNFI	RMSEA
Hypothesized Exogenous Measurement Model	124.47***	62	2.01	.96	.96	.74	.05
<b>Hypothesized Endogenous Measurement Model</b>	<b>1063.12***</b>	<b>265</b>	<b>4.01</b>	<b>.82</b>	<b>.92</b>	<b>.79</b>	<b>.08</b>

\*\*\* $p < .0001$

# SEM Fit Statistics for Alternate Model

Model	$\chi^2$	<i>df</i>	$\chi^2/df$	GFI	CFI	PNFI	RMSEA
Alternative Endogenous Measurement Model	101.92***	24	4.25	.95	.98	.65	.09
Alternative Overall Measurement Model	378.54***	194	1.95	.93	.97	.79	.05
<b>Alternative Structural Model</b>	<b>455.47***</b>	<b>202</b>	<b>2.26</b>	<b>.91</b>	<b>.96</b>	<b>.81</b>	<b>.05</b>

\*\*\* $p < .0001$

# Mediated Results

	R	F	B	SE	$\beta$
Model 1 (DV: Cross-Cultural Adjustment)					
Agreeableness	.48**	124.02**	.36	.05	
Emotion Management	.51**	75.12**	.05	.01	.22**
Model 2 (DV: Cross-Cultural Competence)					
Agreeableness	.57**	205.19**	.35	.03	
Emotion Management	.59**	112.51**	.03	.01	.17**
Model 3 (DV: Cross-Cultural Adjustment)					
Agreeableness	.48**	124.02**	.12	.05	
Emotion Management	.51**	75.12**	.03	.01	.14*
Cross-Cultural Competence	.65**	102.10**	.66	.06	.49**

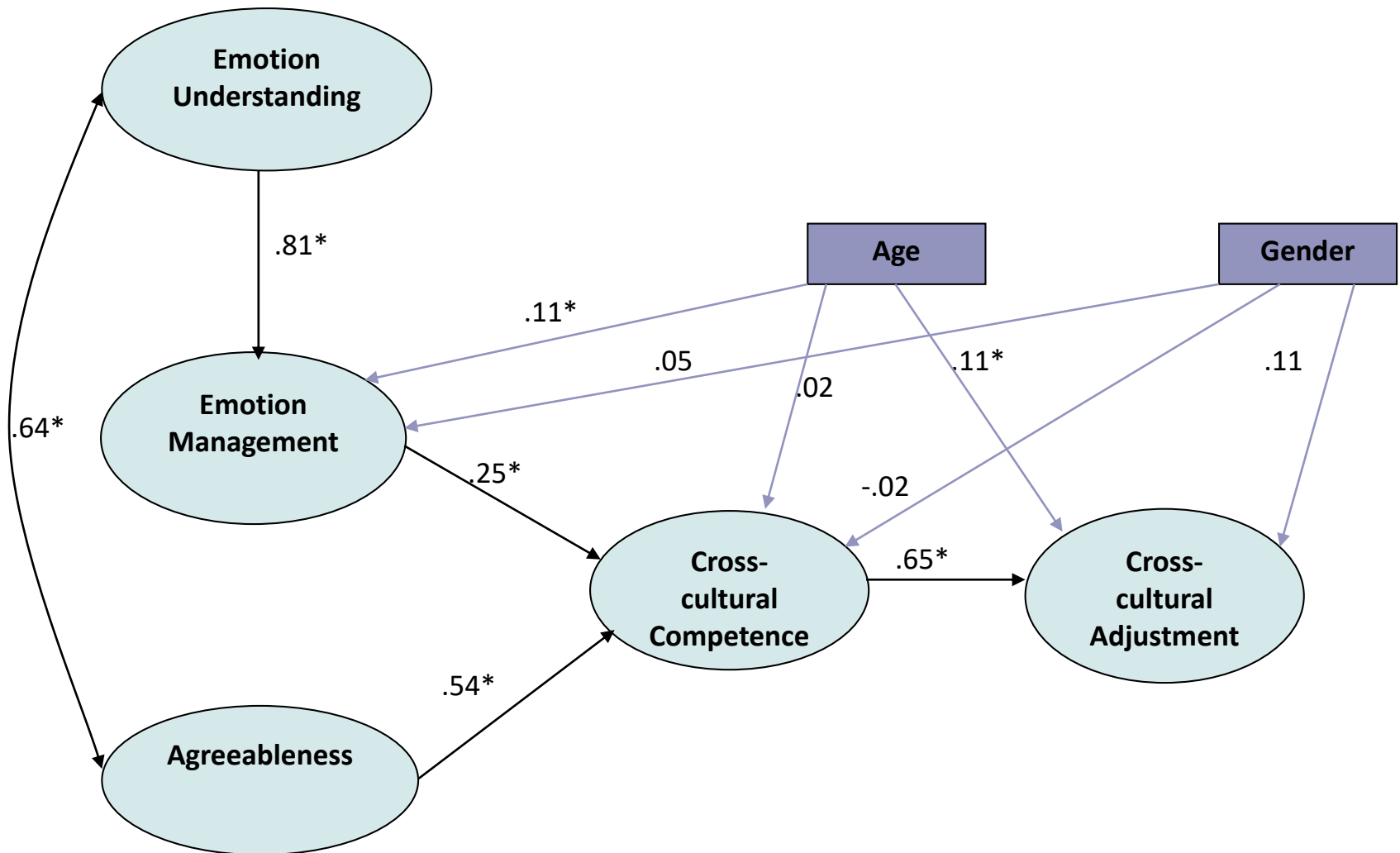
\* $p < .01$

\*\* $p < .001$

# Summary of Results

- There exists a “cascading effect” between the emotional abilities.
- Findings hold after controlling for agreeableness.
- Cross-cultural competence (as one construct) plays a mediating role.
- Cross-cultural competence positively impacts adjustment.
- All hypotheses were generally supported.
  - Hypotheses 1-3 ☒
  - Hypothesis 4 ☒
  - Hypotheses 5-7 ☒

# Alternate Model with Control Variables



# Summary of Findings

- Hierarchical relationship between emotional abilities (Joseph & Newman, 2010; Mayer & Salovey, 1997; Mayer et al., 2008).
  - Emotion understanding serves as an antecedent to emotion management.
- Validation of cross-cultural competence as one construct.
  - Cross-cultural dimensions act in a cumulative, interdependent manner.

# Summary of Findings

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- The role of agreeableness
  - Incremental validity of emotion abilities
- Mediating role of cross-cultural competence
- Cross-cultural adjustment as an outcome of cross-cultural competence
- The role of gender and age

# Limitations and Future Directions

- External validity of findings
- Common method variance
- Validate a cross-cultural competence measure
- Explore the specific role of cognitive ability
- Development of a DOD 3C framework

# Questions?

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# Support Slides

# Results: Correlation Matrix

Variables	Mean	S.D.	1	2	3	4	5	6	7	8	SK	KT
1. Understanding Emotions	7.62	2.98	(.69)	--							-.31	-.60
2. Managing Emotions	13.64	3.93	.52**	(.70)	--						-.77	-.32
3. CC Knowledge	3.66	.78	.33**	.42**	(.95)	--					.17	-.58
4. CC Skills	3.42	.62	.26**	.35**	.80**	(.88)	--				.63	.22
5. CC Affect	3.45	.63	.24**	.34**	.69**	.73**	(.91)	--			.59	.19
6. CC Adjustment	3.89	.82	.36**	.40**	.55**	.56**	.59**	(.98)	--		-.25	-.70
7. Agreeableness	3.80	.85	.40**	.50**	.59**	.48**	.48**	.48**	(.82)	--	-.81	.74
8. Cross-cultural Competence	3.51	.62	.31**	.41**	.93**	.92**	.88**	.62**	.57**	(.95)	.49	-.18

# Data generation procedures

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- Single-factor (SFA) method
  - Understanding emotions (4 parcels)
  - Job satisfaction (3 parcels)
- Content-oriented method
  - Cross-cultural adjustment (3 parcels)
- Total disaggregation technique
  - Managing emotions
  - Cross-cultural knowledge, skills, affect
  - Agreeableness
- Model trimming

# Role of Cognitive Ability (“g”)

- “g” focuses on cognitive abilities
  - Not specific to particular types of context
    - Culturally diverse situations
  - Does not include behavioral or motivational aspects of intelligence
- Emotional abilities predict above and beyond verbal ability (MacCann, 2006).
- Emotional abilities requires some assessment of emotion-related knowledge.
- Relationships between “g” have been small to moderate in size (Ciarrochi et al., 2000; Roberts et al., 2001).

# Practical applications

Training programs could include these modules:

- Behavioral and cognitive component of 3C
  - Cognitive structure analysis
  - Dramaturgical exercises (e.g., role plays)
  - Simulation tasks with real-time feedback
- Emotion understanding
  - Virtual reality scenarios
- Emotion management
  - Antecedent-focused strategies
  - Response-focused strategies